

bracing points of interest in the neighborhood of the city, and extending to the terminal moraine, on the line of the Delaware and Lackawanna Railroad in New Jersey, and the "mountain colonnades" of Orange, were participated in by a fair proportion of the class.

The condition of the collections of the Academy in the department of paleontology has been materially improved during the year, a complete re-arrangement of the fossils of this country having been effected. The work of identifying and labeling has made considerable progress, and it is hoped that in a short time proper attention may be given to the rich collections illustrating European paleontology as well.

The additions during the year, which are recorded elsewhere, have been neither very numerous nor important. A fine series of Oligocene fossils from Germany, comprising nearly 200 species, has been obtained from Dr. Otto Meyer, in exchange for American Tertiary forms. The Academy is also indebted to Mr. Joseph Willcox for an extensive series of the Nummulitic rock of Florida.

Very respectfully.

ANGELO HEILPRIN,

Professor of Invertebrate Paleontology.

REPORT OF THE PROFESSOR OF MINERALOGY.

The Professor of Mineralogy respectfully reports that during the spring months of 1884, he delivered a course of twenty lectures upon the Geology and Mineralogy of Eastern Pennsylvania. The alternate lectures were given in the open air, and consisted of studies in the field at localities of geological and mineralogical interest in the vicinity of Philadelphia. At the close of the course a more extended excursion was taken to Mauch Chunk, Hazleton, and Drifton, where, through the kindness of friends, unusual facilities were offered for studying the geological structure and the methods of mining anthracite coal. A description of the "field lectures," as reported in a daily newspaper, is herewith presented. The average attendance was nearly forty persons, of whom more than one-half were ladies.

The mineralogical collection of the Academy, as shown in the accompanying Curator's report, has received a number of valuable additions. The placing of the minerals of Pennsylvania in a special case will, it is believed, not only be a convenience to visitors, but, as it becomes more complete, will stimulate a search for new mineral localities. The mineralogists of the State are particularly asked to contribute to this local collection.

As in previous annual reports, attention is again called to the need, in this department, of scientific apparatus, both for the purposes of teaching and for the prosecution of original research. A lithological microscope, a reflecting goniometer, and a Groth's universal apparatus for polarized light, are among the instruments most urgently needed.

Respectfully submitted,

H. CARVILL LEWIS,

Professor of Mineralogy.

REPORT OF THE PROFESSOR OF INVERTEBRATE ZOOLOGY.

The Professor of Invertebrate Zoology respectfully reports that during the past year, since March, when he was placed in office, he has delivered his inaugural address on "The Study of Biology in Germany" (March 16), and six lectures on "Elementary Histology," with demonstrations.

He further reports that the collections under his charge have greatly increased, especially by the addition of a superb collection of marine sponges from the western coast of Florida, presented by Mr. Joseph Willcox. The collection was described by Henry J. Carter in the Proceedings.

A course of some twenty lectures is intended to be given in the early part of the coming year (January, February and March), the subject being "Some of the Principles of Zoology."

Very respectfully,

BENJAMIN SHARP,

Professor of Invertebrate Zoology.